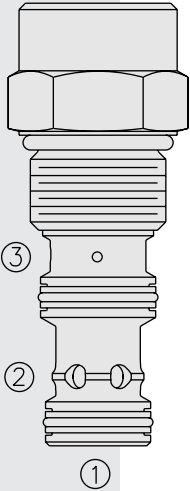


# PRESSURE CONTROLS

## ER12-S30 Pressure Reducing Spool Logic Element



### DESCRIPTION

A screw-in, cartridge-style, spring biased, pressure reducing logic element.

### OPERATION

In its steady state, the **ER12-S30** allows flow from ② to ① with the spring chamber constantly drained at ③. On attainment of a pre-determined pressure at ①, set by a (remote) pilot relief valve connected to port ③, the spool shifts to restrict input flow at ②, thereby regulating pressure at ①.

### FEATURES

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Optional spring ranges to 207 bar (3000 psi).
- Hardened spool and cage for long life.
- Industry common cavity.

### RATINGS

**Operating Pressure:** 350 bar (5000 psi); Polyurethane seals are recommended for operation up to 5000 psi; Aluminum bodies for this product are rated to 3000 psi

**Proof Pressure:** 390 bar (5700 psi)

**Flow:** See Performance Chart

**Maximum Pilot Flow:** 9.5 lpm (2.5 gpm)

**Bias Spring:** 8.3 bar (120 psi)

**Temperature:** -40 to 120°C with standard Buna seals

**Filtration:** See page 9.010.1

**Fluids:** Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1

**Installation:** No restrictions; See page 9.020.1

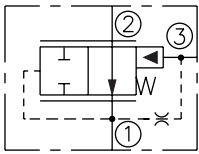
**Cavity:** VC12-S3; See page 9.112.1

**Cavity Tool:** CT12-S3XX; See page 8.600.1

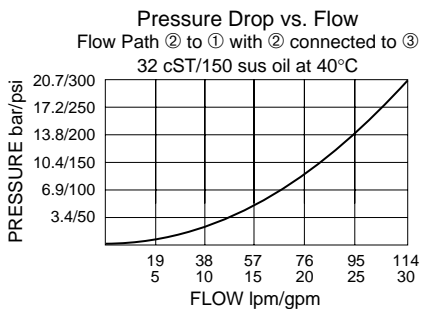
**Seal Kit:** SK12-3X-BM; See page 8.650.1

### SYMBOLS

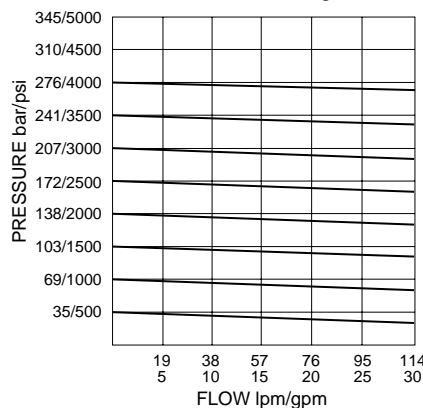
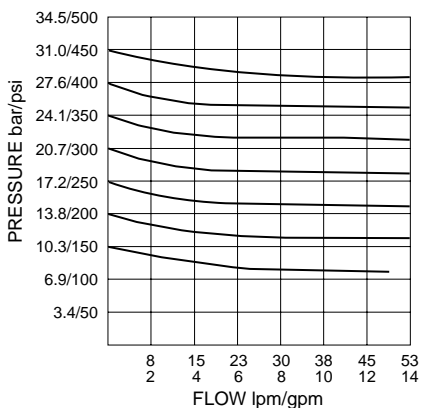
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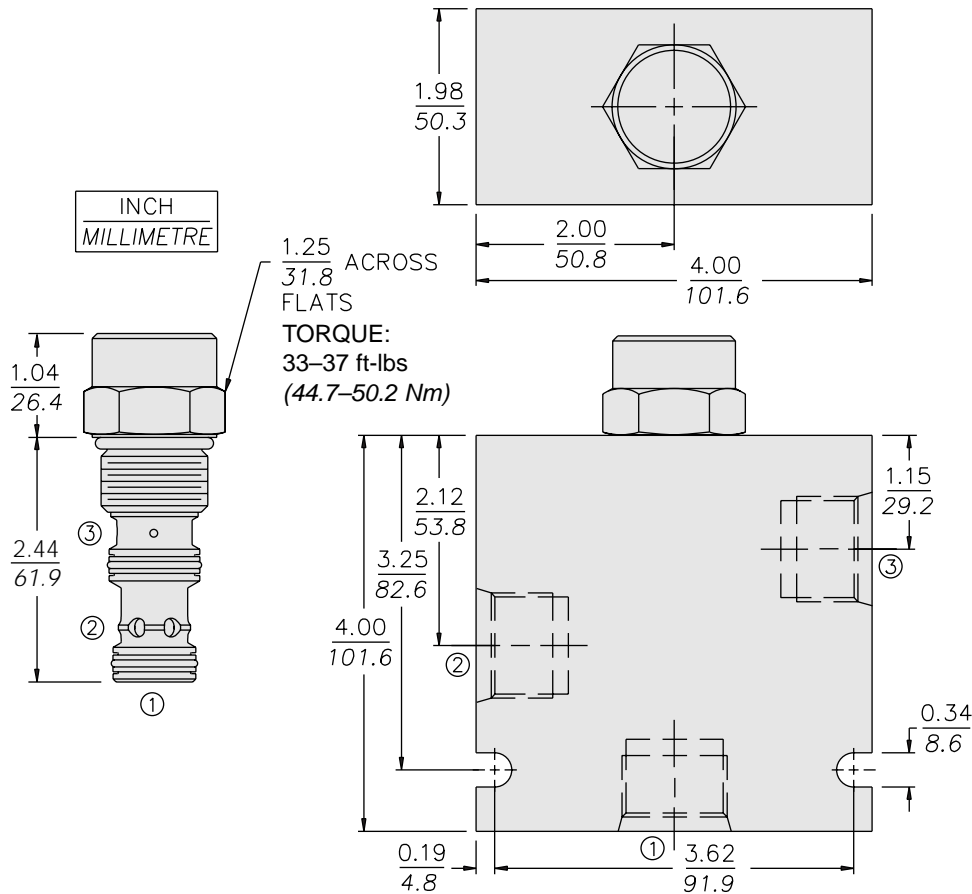
### PERFORMANCE (Cartridge Only)



#### Reduced Pressure vs. Flow at Different Pilot Relief Valve Settings



**DIMENSIONS**



**MATERIALS**

**Cartridge:** Weight: 0.29 kg. (0.63 lbs.)  
 Steel with hardened work surfaces.  
 Zinc-plated exposed surfaces.  
 Buna N O-rings and polyester elastomer back-ups standard.

**Standard Ported Body:** Weight: 1.13 kg. (2.5 lbs.) Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.012.1.

**TO ORDER**

**ER12-S30 -**

<b>Porting</b>	
Cartridge Only	<b>0</b>
SAE 8	<b>8T</b>
SAE 10	<b>10T</b>
SAE 12	<b>12T</b>
1/2 in. BSP*	<b>4B</b>
3/4 in. BSP*	<b>6B</b>
*BSP Body; U.K. Mfr. Only	
<b>Seals</b>	
Buna N (Std.)	<b>N</b>
Polyurethane	<b>P</b>
Fluorocarbon	<b>V</b>

Note: Polyurethane seals are recommended for operation over 241 bar (3500 psi)